AMENDMENTS TO THE CLAIMS

Claims 1-15 - cancel without prejudice.

- Method of drying photo resist layers 16. (New) comprising exposing in a deaerated chamber at least one substrate with a photo resist layer applied thereon to IR radiation from an IR radiation source whose power is controllable, measuring temperature or a temperaturedependent parameter in a vicinity of said photo resist layer, and controlling the power of said IR radiation source on a basis of the temperature or the temperature-dependent parameter measured in such a way that a predetermined development of temperature versus time occurs during drying, wherein said predetermined development of the temperature versus time is selected so that the temperature is initially constant and then undergoes a linear, step-shaped or rampshaped increase throughout the drying.
- 17. (New) Method according to claim 16, wherein the temperature is measured underneath said substrate.
- 18. (New) Method according to claim 16, wherein the temperature of an area containing said photo resist layer is measured from an upper side of said photo resist layer by a pyrometer.
- 19. (New) Method according to claim 16, wherein the predetermined development of the temperature versus time is initially experimentally established for each new

AS

5373/USSN 09/700,033 Group Art Unit 1756

combination of materials of said photo resist layer and said substrate.

- 20. (New) Method according to claim 16, wherein a quantity or concentration of solvents is detected in air issuing from said deaerated chamber, and when the quantity or the concentration of solvents drops below a predetermined limit, completion of the drying is initiated by down-control of the power of said IR radiation source.
- 21. (New) Method according to claim 16, wherein the IR radiation source has a maximum IR radiation within a range of from 1 to 3 $\mu \rm m$.
- 22. (New) Method according to claim 16, further comprising moving a plurality of said at least one substrate in a rotary movement about an axis in the deaerated chamber to dry simultaneously said plurality of said at least one substrate, and controlling the temperature measurement in a timed manner so that for each passage of one substrate of said plurality through a measuring field wherein the temperature is measured, a measurement is performed.

HON